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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/796,025	03/10/2004	Wataru Tazoe	503.43626X00	2138

20457 7590 12/08/2006

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EXAMINER

HAND, MELANIE JO

ART UNIT	PAPER NUMBER
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3761

DATE MAILED: 12/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

JP

<b>Office Action Summary</b>	Application No. 10/796,025	Applicant(s) TAZOE ET AL.	
	Examiner Melanie J. Hand	Art Unit 3761	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 25 September 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 18-24 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 18-24 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Response to Arguments***

Applicant's arguments with respect to claims 1-17 have been considered but are moot in view of the new ground(s) of rejection.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 20,21,23 and 24 are rejected under 35 U.S.C. 112, first paragraph, because the specification, while being enabling for a topsheet made of nonwoven fabric blended with cotton and polypropylene and polyolefin polyester having a wet and dry breathability, does not reasonably provide enablement for a specific composition of the top sheet which results in the claimed wet and dry breathability measurements. The specification does not enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make the invention commensurate in scope with these claims. A specific composition description of the claimed topsheet having said breathability measurements is required for the scope of enablement of claim 19 but is not present in the disclosure as filed.

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***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459

(1966), that are applied for establishing a background for determining obviousness under 35

U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 18 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lawrence et al (U.S. Patent No. 5,911,222) in view of Conkling et al (U.S. Patent No. 5,002,541).

With respect to **claims 18,22**: Lawrence teaches an automatic urine disposal device comprising a urine receptacle 10 having an outer sheet 28 having a substantially rectangular shape and having a U-shaped cross-section (Fig. 2a) (Col. 5, lines 65-67), having a width at the middle portion in the longitudinal direction being narrow, so that it is shaped like an hourglass (Fig. 1), and having a gather provided along its periphery at cut out areas 15,16, formed from the backsheet 28, which is a liquid-impermeable and non-breathable thin sheet made of soft flexible materials, and accommodating a urine absorbent material 24 (Col. 6, lines 58-65) for storing

urine; and a top sheet 21 formed as a liquid-permeable and hard-breathable non-woven fabric, covering a top surface of said urine absorbent material 24 (Fig. 2a) and keeping said urine absorbent material highly airtight as well as said outer sheet 28, a sealed urine tank 113 (Fig. 10); a urine drainage tube 110 for discharging urine from said urine absorbent material 24 to said urine tank 113, and made of soft flexible materials (as evidenced by Lawrences' teaching that said drain tube is capable of being hermetically sealed, i.e. it is deformable and thus flexible (Col. 6, lines 8-10); a vacuum pump 112 for decreasing air pressure in said urine tank 113; wherein urine is absorbed into said urine absorbent material 24 through a hole 20 on said top sheet upon wearer's urination, and said urine is discharged from said urine absorbent material 24 through said urine tube 110 to said urine tank 113.

Lawrence does not teach a urine sensor. Conkling teaches a urine collecting device 10 having a urine sensor 92 provided along urine drainage tube 96 and being electrically conductive in responsive to detecting a urination on the vicinity of one end of said urine drainage tube 96, said urine sensor 92 detecting wearer's urination and initiating vacuum pump 12. ('541, Col. 4, lines 35-63, Col. 5, lines 36-45) Conkling teaches that the sensor operates to activate a pump 12 for draining the urine from vessel 78, which would allow for increased storage area for incoming urine, therefore it would be obvious to one of ordinary skill in the art to modify the device of Lawrence so as to contain a urine sensor that activates the pump taught by Lawrence to drain said receptacle as taught by Conkling.

Claims 19-21, 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lawrence et al ('222) in view of Conkling et al ('541) as applied to claims 18 and 22 above, and further in view of Reed et al (WO 96/08223).

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With respect to **claim 19**: Top sheet 21 is made of non-woven fabric, i.e. polypropylene and polyester blend or cotton, and therefore does not teach cotton and said blend. Conkling also does not teach a top sheet comprised of cotton and polyester/polypropylene blend. Reed teaches a textile absorbent layer suitable for a topsheet comprising a blend of cotton and polypropylene and polyolefin polyester. ('223, Page 26, lines 13-25) Reed teaches that this material is spysorbent, i.e. its absorbent capability varies with ambient humidity in such a way that when the humidity is increased during wear, the breathability is greater than when the article is in a dry state, preventing bacterial formation by buildup of excess exudate (Page 6, lines 1-11), thus it would be obvious to one of ordinary skill in the art to modify the topsheet taught by the combined teaching of Lawrence and Conkling so as to be comprised of the textile layer film taught by Reed to prevent irritation and rashes on the skin of the user.

With respect to **claims 20,21,23,24**: The combined teaching of Lawrence and Conkling does not teach a breathability for said top sheet. Reed teaches that said textile material has a breathability measured according to the General Textile Testing Method's breathability testing method A prescribed in JIS L 1096, 6.27.1 from 14,515 +/- 1618 g/m<sup>2</sup>/24hrs, or  $1.49-1.86 \times 10^{-5}$  cm<sup>3</sup>/cm<sup>2</sup>/sec (which falls within the range of 0 to 50 cm<sup>3</sup>/cm<sup>2</sup>/sec) when said top sheet is moist, and from 2705 +/- 34 g/m<sup>2</sup>/24 hrs, or approximately  $3.1 \times 10^{-6}$  cm<sup>3</sup>/cm<sup>2</sup>/sec. The combined teaching of Lawrence and Conkling and Reed does not teach a dry breathability that satisfies the range set forth in claims 20,21, 23 and 24 (20 to 100 cm<sup>3</sup>/cm<sup>2</sup>/second) when said top sheet is dry. (Page 35, lines 4-10). However, in light of the rejection under 35 U.S.C. 112, i.e. applicant has not clearly described the composition of the claimed topsheet that effects the claimed dry breathability, and since the composition of the topsheet is a result effective variable with respect to dry breathability, it would be obvious to one of ordinary skill in the art to modify

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the composition of the topsheet taught by the combined teaching of Lawrence and Conkling and Reed to effect a dry breathability within the claimed range.

**Conclusion**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Melanie J. Hand whose telephone number is 571-272-6464. The examiner can normally be reached on Monday-Thursday 8:00-5:30, alt. Fridays 8-4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tatyana Zalukaeva can be reached on 571-272-1115. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Melanie J Hand  
Examiner  
Art Unit 3761

MJH

**TATYANA ZALUKAEVA**  
**SUPERVISORY PRIMARY EXAMINER**

